The Office of Vince Ryan
County Attorney

July 21, 2014

Ann Foster
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Re: San Jacinto Superfund Site

Dear Ms. Foster:

Harris County would like to provide the following additional comments and information related to the Feasibility Study alternatives for the dioxin at the San Jacinto River Waste Pits Superfund Site. Harris County is submitting these comments in response to the responsible parties' and their consultants' statements to the media and others that the toxic materials should not be removed from the Site. Harris County has previously provided comments to EPA in November 2013, April 2014, May 2014 and most recently on July 15, 2014 when it requested an independent third-party investigation into Anchor QEA, LLC and Integral Consulting, the environmental consultants retained by International Paper, Inc., Waste Management, Inc., Waste Management of Texas, Inc., and McGinnes Industrial Maintenance Corporation. As noted in Harris County's letter of July 15, 2014, documents obtained from the responsible parties reveal that they actually retained Anchor and Integral to assist them in selecting and implementing their litigation strategies respect to the Site, as opposed to providing objective scientific information. Anchor and Integral suffer from insurmountable conflicts of interest that should prohibit them from serving as the environmental consultants for the Site and promoting remedies to benefit the financial interests of the responsible parties who pay them, without disclosing their true role. Harris County continues to request a full investigation by EPA into the validity of the work Anchor and Integral conducted at the Site and the responsible parties' refusal to produce over 45,000 documents relating to site work and forming the basis for the RI/FS report improperly authored by their own litigation consultants.

Harris County recognizes that there are many factors that EPA must consider in selecting the remedial action alternatives for the San Jacinto River Waste Pits. One factor raised by Anchor and the responsible parties to argue against a more expensive removal remedy is the protection of surface water quality during contaminated sediment removal. This letter presents information that the responsible parties have not provided to EPA and the public regarding the

9673773

1019 Congress, 15th Floor • Houston, Texas 77002 • Phone: 713-755-5101 • Fax: 713-755-8924

very sound and economical engineering and construction practices that can be utilized to safely and effectively remove the highly toxic dioxin from the San Jacinto River and ensure that it does not continue to expose the public and the environment to harm in the future.

Construction Methods Can Address Potential Risks of Resuspension. The responsible parties and their litigation consultants have not adequately identified the various engineering and construction techniques successfully utilized at most other contaminated sites to address the long-term benefit of human health and ecological resources via contaminant removal and minimization of resuspension during construction. Instead, they have chosen to focus on why one **can not or should not** remove the highly contaminated and toxic materials present under an interim rock-pile cap versus using sound engineering and construction techniques to accomplish the best possible goal of a safe environment through permanent source removal. Documents show that the responsible parties' focus on reasons why they claim that dioxin contaminated materials cannot be removed is and has been part of their "global plan" for this site from at least March 2011 to take steps to make sure that a "dig and haul" remedy would ultimately **not** be selected by EPA. The documents revealing their agreement to act to take steps to steer the remedy selection away from a removal remedy showing that they have a vested financial interest in devoting their efforts to sell a cheap remedy of leaving their dioxin in the river.[1]

To argue against the "dig and haul" removal remedy that the responsible parties admit they may be facing for this site, they raise the potential that dredging contaminated sediment may allow a small percentage of sediment particles to become re-suspended in surface water during dredging operations. They have sought to identify and emphasize this potential risk without mentioning to EPA and the public that there are numerous techniques commonly implemented to protect water quality against such potential issues. The most common includes the use of equipment designed to minimize re-suspension, such as turbidity curtains to contain suspended particles as well as operating procedures to minimize re-suspension. In cases where additional

[1] See attached March 9, 2011 emails from and to Waste Management's Director of Closed Sites to International Paper Company's Senior Environmental Remediation Project Manager and the District Manager of Waste Management's Closed Sites Management Group discussing work on what they called a "global plan" to build consensus with the community action group members "to view the TCRA [temporary rock cap] as part of the permanent remediation action at the site." The 2011 communications are extremely troubling because they raise questions about how the responsible parties' and their consultants' work was conducted in light of their apparent pre-selection of the rock pile cap as the final remedy they intended to advance and promote for the Site, years before the Feasibility Study was even completed. Those same emails discuss Waste Management's position that "we need to control our message and build consensus [are] we may be facing a dig and haul/burn as part of the final remedy." Their emails also discussed the need to have their consultant from Anchor Environmental – one of the consultants who authored the Feasibility Study report submitted to EPA – present at the community meetings "to control our message," noting that the EPA project manager "will not speak out of turn when the Anchor representative is present because he knows he will be called out immediately." Now, in 2014, after their consultants Anchor and Integral have completed the Feasibility Study, the responsible parties refuse to reveal to the public the more than 45,000 documents underlying and/or forming the basis of the conclusions of the Feasibility Study, claiming that they information can be hidden because the site work was actually part of their litigation strategy and defense.

protection is needed, watertight rigid barriers, such as steel sheet pile walls or earth berms, have been frequently used effectively and efficiently to address the risk of resuspension.

Temporary Steel Sheet Pile Walls Have Been Used Effectively at Other Sites and Can Be Used at the San Jacinto River Waste Pit Site. Anchor and Integral also fail to inform the public and EPA that temporary steel sheet pile walls have been routinely used to enclose dredge areas at sites such as Cumberland Bay, Lake Champlain, Plattsburgh, NY; Housatonic River ½ Mile and 1 ½ Mile sections, Pittsfield, MA; and Passaic River Phase I, near Newark, NJ. One of the most recent uses was on the Passaic River Phase I work, which was conducted in 2012 and 2013 (Tierra Solutions, 2013).[2] On the Passaic project, the joints between the individual sheet piles were sealed with materials used to make watertight barriers. Sealed sheet piles are used to construct watertight groundwater barrier walls and to make cofferdams that allow surface water to be pumped out inside the enclosure to expose sediments below the water surface. Since the joints are watertight, steel sheet pile walls are effective in containing suspended sediment particles and preventing their release of contaminated sediment particles to the surface water outside the enclosure.

Dredging Limited Areas at a Time Will Effectively Protect Surface Water Quality. A best management practice to protect water quality is to utilize smaller dredge areas and place clean, erosion-resistance backfill over dredged areas as soon as possible. This eliminates the potential for loosened sediment in dredged areas from becoming re-suspended by waves or flood waters. On projects with large areas to be dredged, the site is typically divided into smaller "dredged management units" (DMUs), so the entire site is not uncovered at one time. The work is then managed by DMU, so that when dredging is finished in one DMU, backfill material can be placed while dredging is on-going in other DMUs. DMUs can be as small as the work area done in one day, but are more typically sized to represent dredge work that can be done in one week. With this approach, while dredging is being conducted in one DMU, surveying would be done in a second DMU and backfill would be placed in a third DMU. With this sequence, the area dredged but not backfilled would be limited to only 2 DMUs. This approach allows smaller manageable areas to be open at one time, thus significantly reducing any potential for unacceptable washouts or resuspension to occur. Dredging work should be started upstream and progress in a downstream direction, when working in rivers. As soon as dredging work is finished in an upstream DMU, backfill should be placed to prevent potential erosion and re-suspension of sediment in the freshly dredged areas. This sequence has been used at many sites, such as Ninemile Creek, Syracuse, NY; Berry's Creek, Newark, NJ; and the Acushnet River, New Bedford, MA. The latter two are tidal rivers where the flow is upstream during incoming tides, similar to the San Jacinto areas. In these cases the work was still done from upstream to downstream to prevent possible re-suspension from dredged areas during periods of high rainfall and potential flooding.

[2] Tierra Solutions 2013. Final Construction Report, Lower Passaic River Study Area, Phase I Removal Action, East Brunswick, New Jersey, March 2013

A perfect example of where this has been implemented successfully occurred in a similar removal action right here in Harris County where highly impacted DDT-contaminated sediments were removed from the waters of Greens Bayou – a navigable tributary of the Houston Ship Channel – a short distance away from the San Jacinto River. In that situation, DDT and other highly persistent organo-chlorine pesticides disposed of in the 1970s were discovered in high concentrations from historical manufacturing activities, and which had been discharged into a flood drainage ditch and submerged sediments in Greens Bayou. Like the San Jacinto Site, fish and crabs were found to be heavily impacted from sediment exposure. A bank-to-bank dredge to remove the DDT was designed, with 6 separate DMUs for sequencing purposes. Within six months after the completion of the dredging, a post-dredging sampling program was designed to confirm substantial removal of source material. This removal remedy was accomplished successfully, and avoided having to place a cap or other engineered remedy into the waterway.

Again, it is concerning that Anchor and Integral have not, as far as Harris County is aware, provided this information to EPA and the public. Instead, it appears they have focused their data collection, reports, and comments to implement their clients', the responsible parties', global strategy to make sure that the temporary remedy is the final remedy and that the dioxin is left in place in the river.

A Properly Constructed, Maintained Earth/Rock Berm Can Protect Surface Water During the Limited Time for Contaminated Material Removal. Given the shallow water depths at the San Jacinto Site, it is also feasible to construct a temporary earth/rock berm around the majority of the potential dredge and removal areas. The berm could be placed where the existing ground surface elevation is elevation minus 1 to 3 feet (NAVD88 datum), or higher. A berm that is suitably engineered, made of the appropriate material, monitored, and maintained would provide complete containment of any re-suspended sediment, which would eliminate potential impacts to water quality and sediment quality during the period of dredging.

The excavation could be sequenced to work from the center of the area that is above mean tide level towards the perimeter. The unexcavated area around the excavation would serve as a berm to contain re-suspended sediment. This could be done with, or without, the temporary berm described in the comment above.

Concerns About Adverse Weather Can Be Adequately Addressed. Weather forecasts and the potential for large storms or hurricanes can be monitored daily. If they are observed to have a high probability of impacting the site area during construction activities, then activities can be undertaken to close up the few small areas (DMUs) that are open to avoid potential impacts to surface water quality, such as from flooding or erosion. This type of site security is accomplished on every construction project, but especially on those located in an area that has the potential for flooding. Current weather forecasting and storm tracking provide ample advance warning of potential storms so that contractors can move equipment out of the way and cover any open excavations. Contractors routinely remove their equipment from the paths of storms and work plans address securing of site work and locales prior to such events and demobilization.

A summary of construction approaches that could be easily implemented with good construction techniques to minimize any potential for contaminated sediments to leave the existing site area is set forth below.

1. Berms can be placed as an outside protection to all or part of the Site.
2. Sheet piles with gaskets can be placed around the site or in combination with berms to obtain needed elevations of 5 ft. or higher above high tides and river elevations.
3. Turbidity curtains can be placed around the entire site as an extra layer of protection.
4. Open and excavate 2 – 3 DMUs at a time. Opening smaller areas allows for better management of work areas as well as minimizing potential for contamination if storms are present.
5. Watch Weather Forecast daily and secure site if large storms or hurricanes approach.

Numerous potential site and construction variations/combinations can be implemented with berms, sheet pile, and turbidity curtains. These can occur in shallow as well as deeper water in order to remove the toxic contaminants and provide protection while doing so. These construction technologies are achievable for modest costs and provide substantial protections. These sound and economical engineering and construction practices can be utilized in order to remove the highly toxic waste in the floodway of the San Jacinto River. The waste material can then be properly disposed of in an upland facility and taken out of an aquatic system where it currently has the potential to continue releasing contamination over the next 100 years or more.

The responsible parties' claim that the contaminated dioxin Can Not be removed is not accurate. The responsible parties' claim that their dioxin contamination cannot be removed from in-stream because the entire site will be open to excavation for over 16 months and a large storm event could wash all the extremely toxic sediments out of the construction area and into the river is not accurate. Removal of the dioxin material can be accomplished in a protective manner through a variety of techniques successfully used in contaminated sediment and other aquatic sites across the country and right here in Harris County as well, though they do not identify these examples. In fact, source removal is particularly suitable in the San Jacinto River location because of the shallow water depths.

The site conditions themselves clearly dictate that removal is the only way that would *permanently* and effectively eliminate exposure to humans and the environment in a way to achieve overall protection of human health and the environment. Even Waste Management and International Paper admitted years ago that they may be **facing either a dig and haul or incineration requirement – both removal remedies** – because that is what generally happens in a high-risk site like the San Jacinto River where men, women, and children are exposed and where the public is at risk from eating seafood contaminated with dioxin. Their understanding in 2011 that they would might have to pay for a removal remedy is identified in their written agreement to implement a "global plan" to influence the remedy selection toward the cheapest

remedy of leaving the dioxin under a rock pile in the river – the remedy that they and their litigation consultants at Anchor and Integral continue to promote.[3]

The vested financial interest of the responsible parties, their admitted global plan to influence the process to avoid a more costly removal remedy and the inherent conflicts of interest of Anchor and Integral – their paid litigation consultants – are all detrimental to the public's interest in ensuring that the remedies for the highly toxic dioxin to which they have been exposed are properly evaluated by the EPA. Those parties' failure to provide EPA and the public with all of the relevant information when arguing that the dioxin should **not** be removed from the San Jacinto River – particularly where such removals are successfully accomplished in numerous waterways around the country and even in nearby Greens Bayou virtually right next door -- shows a significant lack of responsibility to the US EPA, the environment and the people of Harris County.

Very truly yours,

VINCE RYAN
Harris County Attorney

By: _____
Rock W. A. Owens
Managing Attorney
Environment & Infrastructure Group

Attachments

[3] See emails identified in Footnote 1.

From: Shafer, Andrew
To: Smith, March; Philip J Slowiak
Sent: 3/9/2011 8:49:16 AM
Subject: RE: Please mark your calendars: next CAC meeting and other informational items.

From experience we know how Valmichael addresses the crowd. When we don't have someone present he will say anything.

Andrew L. Shafer, P.E.
District Manager, W Closed Sites Management Group
9590 Clay Road
Houston, TX 77080

Office No.: 713-772-9100 Ext. 109
Fax No: 832-668-3188
Cell No. 832-724-3802
Did you know? "Waste Management's landfills provide over 24,000 acres of protected land for wildlife habitats and 73 of the sites are certified by the Wildlife Habitat Council."

Be Safe!!

From: Smith, March
Sent: Wednesday, March 09, 2011 8:47 AM
To: Philip J Slowiak
Cc: Shafer, Andrew
Subject: RE: Please mark your calendars: next CAC meeting and other informational items.

Good point, however, David is the lead dog when it comes to building a consensus with the CAC members to view the TCRA as part of the permanent remedial action at the site. I am working on a global plan to build this consensus with all stakeholders and David is the best spokesman to address this group and control our message. ValMichael will not speak out of turn when David is present because he know s he will be called out immediately. We need to control our message and build consensus are we may be facing a dig and haul/burn as part of the final remedy.

March Smith
Director of Closed Sites

From: Philip J Slowiak [mailto:Philip.Slowiak@ipaper.com]
Sent: Wednesday, March 09, 2011 9:41 AM
To: Smith, March
Cc: Shafer, Andrew
Subject: RE: Please mark your calendars: next CAC meeting and other informational items.

Let's talk about this. I'm not so sure it's in our best interest to have Dave become too familiar a face at these meetings. It might be better to let Valmichael report all the progress. We need to keep Dave in reserve for bigger issues. The CAC won't move on to other big picture issues if Dave is the center of attention.

Philip J Slowiak, Sr., CSP
Senior Project Manager
Environmental Remediation
INTERNATIONAL PAPER COMPANY
6400 Poplar Avenue
Memphis, TN 38197
Office: 901-419-3845
Cell: 901-604-1952
Fax: 901-214-9550
philip.slowiak@ipaper.com

From: Smith, March [mailto:msmith4@wm.com]
Sent: Wednesday, March 09, 2011 6:08 AM
To: Philip J Slowiak
Cc: Shafer, Andrew
Subject: FW: Please mark your calendars: next CAC meeting and other informational items.

Phil, I think we should have David present the current status in person at the meeting on April 20 as it is designated as a "big picture" meeting. Let me know if you agree and I will forward this information to him.
Regards,

March Smith
Director of Closed Sites

From: Gordon, Leah (CAO) [mailto:Leah.Gordon@cao.hctx.net]
Sent: Tuesday, March 08, 2011 4:41 PM
To: 'walters.donn@epa.gov'; 'ctaylor@tceq.state.tx.us'; Obey, Rita (PHES); Seegers, Mark (Commissioner Precinct 2); Haldin, Kenneth; 'bstokes@galvbay.org'; 'kristi.corse@h-gac.com'; 'Nann.Barbara@epamail.epa.gov'; 'tzhone.stephen@epa.gov'; 'sanchez.carlos@epa.gov'; 'Leos.Valmichael@epamail.epa.gov'; 'lvoskov@tceq.state.tx.us'; Miller, Gail (Commissioner Precinct 2); Schaffer, Michael (PHES); Cron, Catarina (County Judge's Office); 'Axe, Al'; Smith, March; Shafer, Andrew; 'Steve.Ginski@IPaper.com'; 'jcermak@bakerlaw.com'; 'philip.slowiak@ipaper.com'; 'wpetit@jgdpc.com'; 'Powers, Rachel D.'; 'gmcmahan@poha.com'; 'nhausler@poha.com'; 'lhenry@poha.com'; 'Rich O'Connell'; 'Patricia.Radloff@tpwd.state.tx.us'; 'don.pitts@tpwd.state.tx.us'; O'Rourke, Terence (CAO); Sanders, Herman (HCPID); Hamilton, Dimetra (HCPID); 'Leonard Polk'; 'coats.janetta@epa.gov'; 'Scott Jones'; 'Tina.walker@dshs.state.tx.us'; 'David.Rivera@dshs.state.tx.us'; 'Will Graham'; 'Mary.Risner@tceq.texas.gov'
Cc: Patel, Snehal (CAO); Majors, Curtrina (CAO)
Subject: Please mark your calendars: next CAC meeting and other informational items.

1. The next Community Awareness Committee will be on Wednesday, March 23, 2011 at 9:30 AM. If you would like to request specific agenda items, please email Snehal and Donn.

2. We are also sending the following helpful EPA websites on San Jacinto River Waste Pits that were launched recently:

Information about the site generally (S. Tzhone):

http://www.epa.gov/region6/6sf/texas/san_jacinto/

Information specific to the TCRA (V. Leos):

www.epaosc.org/sanjacwpremoval

Please review these websites and we will be discussing/sharing comments with EPA at the next meeting.

3. Every two months, a big picture status report will be provided. The next one is scheduled

on April 20, 2011 at the regularly scheduled CAC meeting.

Best wishes,
Snehal R. Patel

Leah A. Gordon
Environmental Paralegal
Environmental Regulatory Section
Office of Vince Ryan
Harris County Attorney
1019 Congress
Houston, Texas 77002
Phone: (713) 755-1277
Fax: (713) 755-2680
Email: leah.gordon@cao.hctx.net